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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO.       |
|---|-------------|----------------------|---------------------------------|------------------------|
| 10/534,234  | 05/06/2005  | Takashi Osa          | HEI-007                         | 3360                   |
| 32628 7590 07/16/2007<br>KANESAKA BERNER AND PARTNERS LLP<br>1700 DIAGONAL RD<br>SUITE 310<br>ALEXANDRIA, VA 22314-2848 |             |                      | EXAMINER<br>KAYES, SEAN PHILLIP |                        |
|   |             |                      | ART UNIT<br>2833                | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>07/16/2007         | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/534,234 | <b>Applicant(s)</b><br>OSA ET AL. |  |
|                              | <b>Examiner</b><br>Sean Kayes        | <b>Art Unit</b><br>2833           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/6/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. Figures 10-12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 5/6/2005 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto (US 4553851.)

5. With respect to claim 1 Matsumoto discloses an electronic watch with a solar cell (2 figure 4) which is arranged substantially vertically with respect to a dial, wherein a light leading portion (33 figure 4) is provided at a peripheral edge of the dial, a light permeable dial trim ring (34 figure 4) is arranged at the peripheral edge of the dial, and a part of a photovoltaic area of the solar cell and a part of the dial trim ring which covers the photovoltaic area of the solar cell are arranged to be lower than a dial (12 figure 4) upper surface height.

6. With respect to claim 6 Matsumoto teaches the electronic watch with a solar cell according to claim 1, wherein

- a flange portion (18 figure 4) which fixes a glass (32 figure 4) to a watch case of the electronic watch with the solar cell is provided outside the dial trim ring (34 figure 4), the solar cell (2 figure 4) and a watch movement or an annular convex portion of a casing frame which holds the solar cell;

- the dial trim ring (34 and 31 figure 4) is arranged directly below the glass (32 figure 4); and
- a blind portion (18 figure 4) is provided above the dial trim ring of the glass and/or the solar cell.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US 6521822) in view of Matsumoto (US 4553851), and applicant's admitted prior art.

With respect to claim 1 Ito discloses an electronic watch with a solar cell (10 figure 3) which is arranged substantially vertically with respect to a dial (see 112 rejection to claim 1.)

Ito does not teach wherein a light leading portion is provided at a peripheral edge of the dial, a light permeable dial trim ring is arranged at the peripheral edge of the dial, and a part of a photovoltaic area of the solar cell and a part of the dial trim ring which covers the photovoltaic area of the solar cell are arranged to be lower than a dial upper surface height.

According to applicant's discussion of the prior art providing solar cells located at the periphery of the dial is well-known. Particularly applicant's admitted prior art figure 12

shows a photovoltaic cell mounted to the side of dial 43 with a light permeable dial trim ring.

Matsumoto teaches providing solar cells along the periphery for the purpose of increasing design flexibility when working with said solar power means. Matsumoto teaches providing a light leading portion for direction light toward the solar cells located on the periphery. Matsumoto teaches providing such a light directing means near the periphery of the dial.

At the time of the invention it would have been obvious to one skilled in the art to modify Ito's watch such that the photovoltaic element was located along a sidewall and such that support ring 38 is light permeable, as taught by applicant's admitted prior art. The suggestion or motivation for doing so would be to prevent the photocell 10 from obscuring the view of the dial thus giving greater design flexibility as taught by Matsumoto.

At the time of the invention it would have been obvious to one skilled in the art to use Ito's dial as a light leading portion for directing light to the side mounted solar cells as taught by Matsumoto. The suggestion or motivation for doing so would be to increase the amount of light that hits the solar means as taught by Matsumoto.

9. With respect to claim 2 Ito as modified in view of Matsumoto, and applicant's admitted prior art teach the electronic watch with a solar cell according to claim 1, wherein a thickness of the inner side of the dial is set larger than that of the peripheral edge (figure 3)

10. With respect to claim 3 Ito as modified in view of Matsumoto, and applicant's admitted prior art teach the electronic watch with a solar cell according to claim 1. Ito teaches wherein the dial has an inclined surface portion which is configured in such a manner that a thickness of the dial (40 figure 3) is reduced from the inner side toward the peripheral edge side.

Ito does not teach the dial being used as a light leading portion. Matsumoto teaches providing a surface such as Ito's dial for the purpose of leading light toward the sides. At the time of the invention it would have been obvious to one skilled in the art to modify Ito's dial to function as a light leading portion as taught by Matsumoto. The suggestion or motivation for doing so would be to direct light toward the solar cells located at the sides as taught by Matsumoto.

11. With respect to claim 4 Ito as modified in view of Matsumoto, and applicant's admitted prior art teach the electronic watch with a solar cell according to claim 1, wherein the dial has a step portion configured in such a manner that a thickness of the dial (40 figure 3) is reduced at the peripheral edge.

Ito does not teach the dial being used as a light leading portion. Matsumoto teaches providing a surface such as Ito's dial for the purpose of leading light toward the sides. At the time of the invention it would have been obvious to one skilled in the art to modify Ito's dial to function as a light leading portion as taught by Matsumoto. The suggestion

or motivation for doing so would be to direct light toward the solar cells located at the sides as taught by Matsumoto.

12. With respect to claim 5 Ito as modified in view of Matsumoto, and applicant's admitted prior art teach the electronic watch with a solar cell according to claim 3, wherein an inclined surface portion is provided to the dial trim ring (38 figure 3 of Ito and applicant's admitted prior art figure 12), and an inclined surface or a step portion of the dial (40 figure 3) of the dial is covered with the inclined surface portion.

Ito does not teach the dial being used as a light leading portion. Matsumoto teaches providing a surface such as Ito's dial for the purpose of leading light toward the sides. At the time of the invention it would have been obvious to one skilled in the art to modify Ito's dial to function as a light leading portion as taught by Matsumoto. The suggestion or motivation for doing so would be to direct light toward the solar cells located at the sides as taught by Matsumoto.

13. With respect to claim 6 Ito as modified in view of Matsumoto, and applicant's admitted prior art teach the electronic watch with a solar cell according to claim 1, wherein

- a flange portion (Ito 36 or left side of item 30 figure 3 and 42 figure 12, applicant's admitted prior art) which fixes a glass to a watch case of the electronic watch with the solar cell is provided outside the dial trim ring (Ito 38 figure 3 and figure



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12, applicant's admitted prior art), the solar cell and a watch movement or an annular convex portion of a casing frame which holds the solar cell;

- the dial trim ring (Ito 38 figure 3 and figure 12, applicant's admitted prior art) is arranged directly below the glass; and
- a blind portion (Ito below item 36 figure 3 and below 42 figure 12, applicant's admitted prior art) is provided above the dial trim ring of the glass and/or the solar cell.

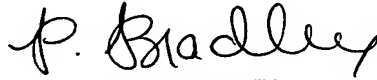
(See 102(b) rejection to claim 6 to see wherein Matsumoto additionally teaches said limitations.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Kayes whose telephone number is (571) 272-8931. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Paula can be reached on (571) 272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SK  
7/2/2007

  
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